

IN THE SPECIFICATION:

Please replace paragraph 2 at page 11, with the following rewritten paragraph:

FIG. 9 is a block diagram for showing a configuration of an operation processing unit;

Please replace paragraph 3 at page 14, with the following rewritten paragraph:

Further, in a case where the candidate blocks that correspond to the target block are given number information such as serial numbers, this number information can be employed as the PID. It is to be noted that if the number information is employed as the PID, allocating process packets of all the serial numbers in the add-up section 103 allows to be recognized a total sum of absolute difference value sums between a given target block and all candidate blocks that can be selected in a search range.

Please replace paragraph 6 at page 35 continuing onto page 36, with the following rewritten paragraph:

At step S11 S211, the operation section 113 decodes the instruction allocated to that input process packet PPb and the process goes to step S12 S212. At step S12 S212, the operation section 113 decides whether the instruction decoded at step S11 S211 is executable, in this case, whether the write address allocated to the input process packet PPb is present in addresses in the memory 120_n that the operation processing unit 102_n has.

Please replace paragraphs 1, 2, 3 and 4 at page 36, with the following rewritten paragraph:

If having decided at step S12 S212 that the write address allocated to the process packet is not present in the addresses in the memory 120_n that the operation processing unit 102_n has, the operation section 113 skips steps S13-S15 S212-S215 and the process goes to step S16 S216

where it sets the request signal s_2 to "1". At step S17 S217, the operation section 113 makes the input process packet PPb as it is a process packet PPc to be output and outputs it and the process goes to step S18 S218 where it returns the request signal s_2 to "0" to end the processing.

If having decided at step S12 S212 that the write address allocated to the process packet is present in the addresses in the memory 120_n that the operation processing unit 102_n has, the process goes to step S13 S213 where the operation section 113 decides whether the same process packet as this input process packet PPb has been input in the past and processed already. If the operation section 113 decides that it has been processed, the operation section 113 performs no processing on that input process packet PPb and ends the processing. In this case, the input process packet PPb is unnecessary, so that the operation section 113 will not output a process packet that corresponds to this input process packet PPb.

If having decided at step S13 S213 that it has not yet been processed, the process goes to step S14 S214 where the operation section 113 executes the instruction allocated to the input process packet PPb. That is, the operation section 113 writes the image data allocated in the input process packet PPb into the memory 120_n and the process goes to step S15 S215.

At step S15 S215, the operation section 113 rewrites, as necessary, the state portion in the input process packet PPb in accordance with the processing it has performed at step S14 S214 and the process goes to step S16 S216.

Please replace paragraph 1 at page 37, with the following rewritten paragraph:

At step S16 S216, the operation section 113 sets the request signal s_2 to "1". At step S17 S217, the operation section 113 makes the input process packet PPb altered at steps S14

S214 and S15 S215 a process packet PPc to be output and outputs it and then, at step S18 S218, returns the request signal s₂ to "0" to end the processing.

Please replace paragraphs 1, 2, 3 and 4 at page 38 continuing onto page 39, with the following rewritten paragraph:

At step S11 S311, the operation section 113 decodes the instruction allocated to that input process packet PPb and the process goes to step S12 S312. At step S12 S312, the operation section 113 decides whether the instruction decoded at step S11 S311 is executable, in this case, whether the read address allocated to the input process packet PPb is present in addresses in the memory 120_n that the operation processing unit 102_n has.

If having decided at step S12 S312 that the read address allocated to the process packet is not present in the addresses in the memory 120_n that the operation processing unit 102_n has, the operation section 113 skips steps S13-S15 S313-S315 and the process goes to step S16 S316 where the operation section 113 sets the request signal s₂ to "1". At step S17 S317, the operation section 113 makes the input process packet PPb as it is a process packet PPc to be output and outputs it and the process goes to step S18 S318 where it returns the request signal s₂ to "0" to end the processing.

If having decided at step S12 S312 that the read address allocated to the process packet is present in the addresses in the memory 120_n that the operation processing unit 102_n has, the process goes to step S13 S313 where the operation section 113 decides whether the same process packet as this input process packet PPb has been input in the past and processed already. If the operation section 113 decides that it has been processed, the operation section 113 performs no processing on that input process packet PPb and ends the processing. In this case, the input

process packet PPb is unnecessary, so that the operation section 113 will not output a process packet that corresponds to this input process packet PPb.

If the operation section 113 has decided at step S13 S313 that it has not yet been processed, the process goes to step S14 S314 where it executes the instruction allocated to the input process packet PPb. That is, the operation section 113 reads the image data from the memory 120_n and allocates the image data to the input process packet PPb and the process goes to step S15 S315.

Please replace paragraphs 1, 2 and 5 at page 39, with the following rewritten paragraph:

At step S15 S315, the operation section 113 rewrites, as necessary, the state portion in the input process packet PPb in accordance with the processing it has performed at step S14 S314 and the process goes to step S16 S316.

At step S16 S316, the operation section 113 sets the request signal s₂ to "1". At step S17 S317, the operation section 113 makes the input process packet PPb altered at steps S14 S314 and S15 S315 a process packet PPc to be output and outputs it and then, at step S18 S318, returns the request signal s₂ to "0" to end the processing.

At step S11 S411, the operation section 113 decodes the instruction allocated to that input process packet PPb and the process goes to step S12 S412. At step S12 S412, the operation section 113 decides whether the instruction decoded at step S11 S411 is executable, in this case, whether pixels of at least one of the target block and the candidate block are stored in the memory 120_n that the operation processing unit 102_n has.

Please replace paragraphs 2, 3 and 4 at page 40, with the following rewritten paragraph:

If having decided at step S12 S412 that neither the target block nor the candidate block is stored in the memory 120_n that the operation processing unit 102_n has, the operation section 113 skips steps S13-S15 S413-S415 and the process goes to step S16 S416 where it sets the request signal s₂ to "1". At step S17 S417, the operation section 113 makes the input process packet PP_b as it is a process packet PP_c to be output and outputs it and the process goes to step S18 S418 where the operation section 113 returns the request signal s₂ to "0" to end the processing.

If having decided at step S12 S412 that the pixels of at least one of the target block and the candidate block are stored in the memory 120_n that the operation processing unit 102_n has, on the other hand, the process goes to step S13 S413 where the operation section 113 decides whether the same process packet as this input process packet PP_b has been input in the past and processed already. If the operation section 113 decides that it has been processed, the operation section 113 performs no processing on that input process packet PP_b and ends the processing. In this case, the input process packet PP_b is unnecessary, so that the operation section 113 will not output a process packet that corresponds to this input process packet PP_b.

If having decided at step S13 S413 that it has not yet been processed, on the other hand, the process goes to step S14 S414 where the operation section 113 executes the instruction allocated to the input process packet PP_b.

Please replace paragraphs 1, 2, 3, 4 and 5 at page 41 continuing onto page 42, with the following rewritten paragraph:

That is, at step S21 S521, the operation section 113 first decides whether the pixels of the target block are stored in the memory 120_n that the operation processing unit 102_n has. If having decided at step S21 S521 that the pixels of the target block are not stored in the memory 120_n that the operation processing unit 102_n has, the operation section 113 skips step S22 S522 and the process goes to step S23 S523.

If having decided at step S21 S521 that the pixels of the target block are stored in the memory 120_n that the operation processing unit 102_n has, on the other hand, the process goes to step S22 S522 where the operation section 113 reads the pixels of the target block stored in the memory 120_n , and allocates them to the input process packet PPb, and the process goes to step S23 S523.

At step S23 S523, the operation section 113 decides whether the pixels of the candidate block are stored in the memory 120_n that the operation processing unit 102_n has. If having decided at step S23 S523 that the pixels of the candidate block are not stored in the memory 120_n that the operation processing unit 102_n has, the operation section 113 skips step S24 S524 and the process goes to step S25 S525.

If having decided at step S23 S523 that the pixels of the candidate block are stored in the memory 120_n that the operation processing unit 102_n has, on the other hand, the process goes to step S24 S524 where the operation section 113 reads the pixels of the candidate block stored in the memory 120_n , and allocates them to the input process packet PPb, and the process goes to step S25 S525.

At step S25 S525, the operation section 113 decides whether an absolute difference value sum can be calculated. In this case, the operation section 113 decides whether the calculation of the absolute difference value sum can be performed based on whether in the input process packet PPb, the pixels of the target block are allocated and also the pixels of the candidate block that corresponds to this target block are allocated.

Please replace paragraphs 1, 2, 3 and 4 at page 42, with the following rewritten paragraph:

If having decided at step S25 S525 that the calculation of the absolute difference value sum is impossible, that is, if in the pixels of the target block are not allocated to the input process packet PPb or though the pixels of the target block are allocated, the pixels of the candidate block that corresponds to this target block are not allocated thereto, the operation section 113 skips step S26 S526 to end execution of the absolute-difference-value sum calculation instruction and the process goes to step S15 S415.

If having decided at step S25 S525 that the calculation of the absolute difference value sum is possible, that is, if the pixels of the target block are allocated to the input process packet PPb as well as the pixels of the candidate block that corresponds to this target block are allocated to the input process packet PPb, on the other hand, the process goes to step S26 S526 where the operation section 113 calculates an absolute difference value between each of the pixels of the target block allocated to the input process packet PPb and each of the pixels of the corresponding candidate block and also calculate a total sum of these values.

The operation section 113 adds up this total sum of these absolute difference values and an absolute difference value sum allocated to the absolute-difference-value sum portion in the input process packet PPb and overwrites it by the added value as a new absolute difference value

sum in the absolute-difference-value sum portion in the input process packet PPb, to end execution of the absolute-difference-value sum calculation instruction and the process goes to step S15 S415.

At step S15 S415, the operation section 113 rewrites as necessary the state portion in the input process packet PPb in accordance with processing it has performed at step S14 S414 and the process goes to S16 S416.

Please replace paragraph 1 at page 43, with the following rewritten paragraph:

At step S16 S416, the operation section 113 sets the request signal s_2 to "1". At step S17 S417, the operation section 113 makes the input process packet PPb altered at steps S14 S414 and S15 S415 a process packet PPc to be output and outputs it and then, at step S18 S418, returns the request signal s_2 to "0" to end the processing.